

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended). A method for cleaning a component of an air-conditioning or refrigeration system, said method comprising the following:

- (a) flushing liquid solvent through the component to remove contamination from the component;
- (b) vaporizing the solvent flushed through said component in step (a);
- (c) removing contamination from said solvent vaporized in step (b) so as to clean said solvent of the contamination;
- (d) liquefying said cleaned vaporized solvent;
- (e) re-using said liquefied solvent to flush said component; and
- (f) ~~carrying out~~ repeating steps (a) through (e) in a continuous process.

2 (original). The method of claim 1 wherein said solvent has a boiling point in the range of about 10°C to about 45°C.

3 (original). The method of claim 1 wherein said solvent has a boiling point in the range of about 5°C to about 55°C.

4 (original). The method of claim 1 wherein said solvent has a boiling point in the range of about 0°C to about 61°C.

5 (original). The method of claim 1 wherein said solvent comprises HFC-245fa.

6 (original). The method of claim 1 further comprising the step of:

(h) storing said cleaned liquefied solvent in a storage tank after step (d) and prior to re-use in step (e).

7 (currently amended). The method of claim 6 further comprising the step of

(i) after cleaning the component, stopping steps (a), (e) and (f) while continuing with steps (b), (c) [[, (d) and (h)]] and (d) to remove the solvent from the component.

8 (original). The method of claim 7 further comprising the step of:

(j) purging the contamination removed in step (c).

9 (original). The method of claim 8 wherein the step (j) is carried out prior to step (i).

10 (original). The method of claim 1 wherein said solvent comprises a hydrofluorocarbon.

11 (original). The method of claim 10 wherein said solvent comprises a non-flammable hydrofluorocarbon.

12 (currently amended). A method for using solvent to clean a component of an air-conditioning or refrigeration system and recovering and cleaning the solvent for reuse, said method comprising the following steps:

- (a) providing a source of liquid solvent;
- (b) flushing said liquid solvent from said source through the component to be cleaned wherein said solvent may pick up contamination;
- (c) evaporating the liquid solvent that has exited said component after step (b) so that said solvent becomes gaseous;
- (d) removing said contamination from said gaseous solvent to thereby clean said solvent;
- (e) compressing said gaseous solvent which has been cleaned in step (d);
- (f) condensing said compressed gaseous solvent back to a liquid; and
- (g) returning said liquid solvent to said source for reuse; and

(h) repeating steps (b) through (g) in a continuous process to clean said component.

13 (currently amended). The method of claim 12 further comprising:

(h) (i) after the cleaning of said component, isolating said solvent source from said component to stop solvent from entering said component; and
(h) (ii) continuing with steps (c) through (g) to recover any remaining solvent from the component.

14 (currently amended). The method of claim 12 further comprising:

(h) (i) stopping said steps (a) through (g); and
(h) (ii) using pressure from said source of liquid solvent to forcibly purge the contamination removed in step (d).

15 (original). The method of claim 12 wherein step (c) is carried out by directing said solvent through an expansion valve and an evaporator.

16 (original). The method of claim 12 wherein said solvent comprises HFC-245fa.

17 (original). The method of claim 12 wherein said method is an automated method.

18 (currently amended). The method of claim 4 12 wherein said solvent has a boiling point in the range of about 10°C to about 45°C.

19 (original). The method of claim 1 wherein said component to be cleaned is from an air-conditioning or refrigeration system that includes a hydrocarbon oil.

20 (original). The method of claim 19 wherein said solvent includes trans-1,2 dichloroethylene.

21 - 25(canceled).

26 (original). The method of claim 12 wherein said solvent comprises a hydrofluorocarbon.

27 (currently amended). The method of claim 26 12 wherein said solvent comprises a hydrofluorocarbon and is non-flammable.

28 (new). The method of claim 1 wherein step (c) is carried out with a separator capable of removing oil from said solvent.

29 (new). The method of claim 2 wherein step (d) is carried out with a separator capable of removing oil from said solvent.

30 (new). The method of claim 1 wherein step (c) comprises cleaning said solvent sufficiently such that said solvent does not become more contaminated with each use, thereby allowing said solvent to be continuously reused.

31 (new). The method of claim 12 wherein step (d) comprises cleaning said solvent sufficiently such that said solvent does not become more contaminated with each use, thereby allowing said solvent to be continuously reused.